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PROJECT HEADQUARTERS  
DIRECTIVE 50-10-19OPERATIONS  
20 SEPTEMBER 1971

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## ABORT CRITERIA FOR U-2R OPERATIONAL OR DEPLOYMENT MISSIONS

1. PURPOSE:

To establish abort criteria and to provide guidance for mission pilots and other personnel responsible for the decision to abort an operational or deployment mission.

2. RESPONSIBILITY:

Detachment Commanders will insure that supervisory personnel concerned with control of an operational or deployment mission are thoroughly familiar with the provisions of this Directive.

3. DEFINITIONS:

a. Equal Time Point (ETP). A location where flying time to planned landing base is equal to the time to departure base. Required for all long overwater legs.

b. Emergency Abort. A mission abort caused by an aircraft malfunction which affects safety of flight and dictates that the aircraft exit denied territory as quickly as possible. Deployment aircraft would land at the nearest suitable recovery base.

c. Overflight. Any operational mission in which the aircraft proceeds on a course along, across, or over specified political borders.

d. Approach Phase. That portion of the mission from take off to the point of penetration of denied territory.

e. Penetration Phase. That portion of the mission from point of entry of denied territory to the Continuation Point.

f. Continuation Point. That point on the route of flight beyond which it is deemed advisable for the aircraft to continue the mission as planned. Position of this point

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

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is dependent on several factors; e.g., distance to the briefed landing base, hostile threat to the mission aircraft, proximity of the route to neutral/friendly borders, and type or severity of the malfunction encountered.

g. Withdrawal Phase. That portion of the mission from the Continuation Point to the briefed landing base.

h. Peripheral Mission. Any operational mission in which the article proceeds on a course adjacent to but does not cross specified political boundaries.

i. Deployment. The Project Headquarters directed emplacement of a U-2R to perform an operational or training mission or to replace/exchange a prepositioned aircraft.

4. GENERAL:

a. Mission routes are planned so as to collect the maximum amount of intelligence data with the minimum threat to safety of the mission aircraft. After the route is planned, latest photography of the area within 30 NM of either side of the route is carefully searched for Surface-to-Air Missile (SAM) sites not previously detected and within a 50 NM radius of principal targets and suspect SAM areas. Although this procedure cannot guarantee that the route is free of SAM sites, it does provide some assurance of increased safety.

b. Some malfunctions of aircraft equipment are safety of flight items and make it mandatory that the mission be aborted immediately. Other malfunctions, which do not affect safety of flight, but could impair the success of the mission, are also mandatory causes for abort during the Approach Phase of the mission.

c. After the aircraft has penetrated denied territory so many variables can be present in an abort situation that specific instructions, which will cover each individual case, cannot be formulated. Unless the malfunction dictates an emergency abort, the decision to abort must be made by the mission pilot and the Detachment Commander, based on the circumstances existing at the time and with reference to the guidance outlined in paragraph 5.

d. On an individual mission basis, Project Headquarters will delete certain items of equipment from the list of mandatory causes for abort, but only when their failure/malfunction will not affect the safety of the mission aircraft.

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e. Although it is desirable for a deployment aircraft to be operationally ready (O/R) on arrival, in most situations, time will be available prior to the operational mission for the aircraft and systems to be declared O/R. Unless specifically required by the deployment plan, failures/malfunctions of installed configuration, defensive and collection systems would not necessarily be cause for abort.

#### 5. ABORT CRITERIA:

a. Emergency Abort. Failure or malfunction of any of the following, during any phase of the mission is considered mandatory cause for abort. The mission aircraft over denied territory will exit via the most direct safe route and proceed either to the briefed landing base or nearest friendly landing base, dependent upon fuel remaining and the ability of the pilot to control the emergency. The mission aircraft on a peripheral flight will abort via the shortest safe route away from mainland China coast, and proceed to home base or nearest friendly alternate in accordance with safe flight practices. Deployment aircraft will proceed to the nearest suitable recovery base.

##### (1) Engine.

- (a) Roughness or flameout.
- (b) Oil pressure out of limits.
- (c) Temperatures out of limits.
- (d) Fuel pressure out of limits or uncontrollable fuel feeding.

##### (2) Main AC generator.

##### (3) Autopilot.

##### (4) Oxygen System.

#### b. Overflight.

(1) Approach and Penetration Phases. During these phases and in addition to the emergency abort criteria, failure or malfunction of one or more of the following is also mandatory cause for abort of the mission. During penetration phase, unless the malfunction is serious enough to warrant an emergency abort, pilot should reverse track, exit denied territory via the point of penetration and proceed either to the take off base or briefed landing base via the most direct, safe route dependent upon fuel remaining.

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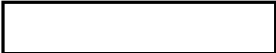
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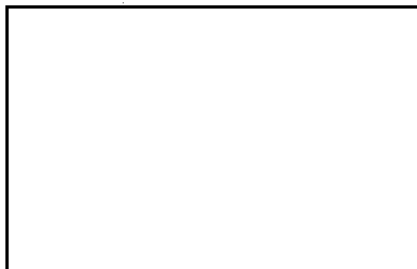
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(a) Auxiliary Systems.

- (1) Hydraulic.
- (2) Cockpit or equipment bay pressurization.
- (3) Primary camera.
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- (5) Single sideband radio.

(b) Defensive Systems.



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(2) Withdrawal Phase. After passing the Continuation Point, the mission aircraft should continue along the planned route unless an emergency abort situation is encountered.

(3) Any other malfunction, either singly or in combination, that could affect the safety of the mission.

(4) Specific instructions for aborting due to weather, contrails, doppler failure and fuel reserves will be provided in the pilot's mission briefing. 25X1

c. Peripheral Missions.



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d. Deployments. In addition to the abort criteria outlined for Emergency Abort and the Approach and Penetration Phases, failure/malfunction of both the TACAN and ADF will be reason for abort. Failure/malfunction of the defensive systems will not be reason for abort unless specifically identified for a mission approaching unfriendly territory.

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